INDEX TO VOLUME 90

INDEX TO SUBJECTS

PAGE

A and B Stars, The Ultraviolet Spectra of. *Otto Struve* 699

Algol, A Spectrophotometric Study of. *John S. Hall* 449

ζ Aurigae, The Coming Eclipse of. *John S. Hall* 629

ζ Aurigae near the Beginning of its 1937 Eclipse, Spectrophotometric Observations of. *John S. Hall* 317

Binaries, Notes on Ellipticity in Eclipsing. *Henry Norris Russell* . . 641

γ Cassiopeiae, On the Origin of Emission in. *Ralph B. Baldwin* . . . 204

Chromospheric Disturbances, Intensity Changes in Bright. *R. S. Richardson* 368

Cluster NGC 2548, Proper Motions in the Galactic. *E. G. Ebbighausen* 689

R Coronae Borealis, Remarks on Loreta's Hypothesis Concerning. *John A. O'Keefe* 294

Cyanogen Discriminant between Giant and Dwarf Stars, The. *Dorrit Hoffleit* 621

P Cygni, The Ultraviolet Spectra of 17 Leporis and. *O. Struve and F. E. Roach* 727

Erratum. *John S. Hall* 640

Erratum. *R. S. Richardson* 208

Europium, The Arc Spectrum of. *Henry Norris Russell and Arthur S. King* 155

Fe III in the Spectra of Early B Stars, New Identifications of. *P. Swings, B. Edlén, and J. Grandjean* 378

Filaments, The Dissipation of Planetary. *Lyman Spitzer, Jr.* 675

Galactic Density Gradients. *Bart J. Bok* 249

Galaxy, Space Reddening in the. *Joel Stebbins, C. M. Huffer, and A. E. Whitford* 209

Globular Cluster Messier 4, Magnitudes and Colors in the. *Jesse L. Greenstein* 387

He I, Transition Probabilities for. *Leo Goldberg* 414

INDEX TO VOLUME 90

INDEX TO SUBJECTS

PAGE

A and B Stars, The Ultraviolet Spectra of. *Otto Struve* 699

Algol, A Spectrophotometric Study of. *John S. Hall* 449

ζ Aurigae, The Coming Eclipse of. *John S. Hall* 629

ζ Aurigae near the Beginning of its 1937 Eclipse, Spectrophotometric Observations of. *John S. Hall* 317

Binaries, Notes on Ellipticity in Eclipsing. *Henry Norris Russell* . . 641

γ Cassiopeiae, On the Origin of Emission in. *Ralph B. Baldwin* . . . 204

Chromospheric Disturbances, Intensity Changes in Bright. *R. S. Richardson* 368

Cluster NGC 2548, Proper Motions in the Galactic. *E. G. Ebbighausen* 689

R Coronae Borealis, Remarks on Loreta's Hypothesis Concerning. *John A. O'Keefe* 294

Cyanogen Discriminant between Giant and Dwarf Stars, The. *Dorrit Hoffleit* 621

P Cygni, The Ultraviolet Spectra of 17 Leporis and. *O. Struve and F. E. Roach* 727

Erratum. *John S. Hall* 640

Erratum. *R. S. Richardson* 208

Europium, The Arc Spectrum of. *Henry Norris Russell and Arthur S. King* 155

Fe III in the Spectra of Early B Stars, New Identifications of. *P. Swings, B. Edlén, and J. Grandjean* 378

Filaments, The Dissipation of Planetary. *Lyman Spitzer, Jr.* 675

Galactic Density Gradients. *Bart J. Bok* 249

Galaxy, Space Reddening in the. *Joel Stebbins, C. M. Huffer, and A. E. Whitford* 209

Globular Cluster Messier 4, Magnitudes and Colors in the. *Jesse L. Greenstein* 387

He I, Transition Probabilities for. *Leo Goldberg* 414

PAGE

Interstellar Band at λ 4430, Note on the. *Frances Sherman* 630

Interstellar Calcium and Color Excess. *Jesse L. Greenstein and Otto Struve* 625

Interstellar H and K and the Absolute Magnitudes of Wolf-Rayet Stars, On the Doublet Ratio of. *Roscoe F. Sanford and O. C. Wilson* . . 235

Interstellar Reddening in the Region of γ Cygni, Note on. *W. W. Morgan* 632

Interstellar Sodium and Calcium, Intercomparison of Doublet Ratio and Line Intensity for. *O. C. Wilson* 244

17 Leporis and P Cygni, The Ultraviolet Spectra of. *O. Struve and F. E. Roach* 727

M Supergiant Stars, Spectra of. *Lyman Spitzer, Jr.* 494

N Stars, Proper Motions and Mean Absolute Magnitudes of. *Ralph E. Wilson* 352

Nebulae. VII. The Transfer of Radiation in the Lyman Continuum, Physical Processes in the Gaseous. *James G. Baker, Lawrence H. Aller, and Donald H. Menzel* 271

Nebulae. VIII. The Ultraviolet Radiation Field and Electron Temperature of an Optically Thick Nebula, Physical Processes in Gaseous. *Lawrence H. Aller, James G. Baker, and Donald H. Menzel* . . . 601

Nebular Spectrograph of the McDonald Observatory. III. Observations Made with the. *Otto Struve, C. T. Elvey, and W. Linke* 301

Negative Ions of Hydrogen and the Opacity of Stellar Atmospheres. *Rupert Wildt* 611

Nitrogen, Note on the Atmospheric Oxides of. *Arthur Adel* 627

Novae, On the Stability of Stellar Models, with Remarks on the Origin of. *Richard C. Tolman* 568

R Stars, The Mean Absolute Magnitude of Class. *Ralph E. Wilson* . . 486

Red Indices in Southern Selected Areas. *Cecilia Payne-Gaposchkin* . . 321

Reddening in the Galaxy, Space. *Joel Stebbins, C. M. Huffer, and A. E. Whitford* 209

Reviews:

Herzberg, Gerhard. *Molekülspektren und Molekülstruktur* (Arthur Adel) 754

Oort, J. H. (ed.). *Transactions of the International Astronomical Union* (O. Struve) 637

Skilling, W. T., and R. S. Richardson. *Astronomy* (Thornton Page) . 207

S Sagittae. *Arthur L. Bennett* 289

PAGE

Series as a Function of Electron Pressure, The Number of Lines in a. *Fred L. Mohler* 429

Sodium, Notes on Atmospheric. *S. Chapman* 309

Spectra, Ionic Depression of Series Limits in One-Electron. *D. R. Inglis and E. Teller* 439

Stability of Spheres of Simple Mechanical Fluid Held Together by Newtonian Gravitation, On the. *Richard C. Tolman* 541

Stability of Stellar Models, with Remarks on the Origin of Novae, On the. *Richard C. Tolman* 568

Stars with Extended Atmospheres, On the Continuous Spectrum of. *D. Barbier and D. Chalonge* 627

Stellar Systems. I–VIII. The Dynamics of. *S. Chandrasekhar* 1

Sunspots from Center to Limb in Light of Different Colors, The Intensities of. *R. S. Richardson* 230

Supernovae to the Study of the Nebular Red Shifts, Possible Applications of. *O. C. Wilson* 634

Temperature Scale, Contribution to the Effective Stellar. *Zdeněk Kopal* 281

Wolf-Rayet Stars, On the Doublet Ratio of Interstellar H and K and the Absolute Magnitudes of. *Roscoe F. Sanford and O. C. Wilson* 235

INDEX OF AUTHORS

PAGE

ADEL, ARTHUR. Note on the Atmospheric Oxides of Nitrogen . . . 627

ADEL, ARTHUR. Review of: *Molekülspektren und Molekülstruktur*, Gerhard Herzberg 754

ALLER, LAWRENCE H., JAMES G. BAKER, and DONALD H. MENZEL. Physical Processes in Gaseous Nebulae. VIII. The Ultraviolet Radiation Field and Electron Temperature of an Optically Thick Nebula . 601

ALLER, LAWRENCE H., DONALD H. MENZEL, and JAMES G. BAKER. Physical Processes in the Gaseous Nebulae. VII. The Transfer of Radiation in the Lyman Continuum 271

BAKER, JAMES G., LAWRENCE H. ALLER, and DONALD H. MENZEL. Physical Processes in the Gaseous Nebulae. VII. The Transfer of Radiation in the Lyman Continuum 271

BAKER, JAMES G., DONALD H. MENZEL, and LAWRENCE H. ALLER. Physical Processes in the Gaseous Nebulae. VIII. The Ultraviolet Radiation Field and Electron Temperature of an Optically Thick Nebula . 601

BALDWIN, RALPH B. On the Origin of Emission in γ Cassiopeiae . . 204

BARBIER, D., and D. CHALONGE. On the Continuous Spectrum of Stars with Extended Atmospheres 627

BENNETT, ARTHUR L. S Sagittae 289

BOK, BART J. Galactic Density Gradients 249

CHALONGE, D., and D. BARBIER. On the Continuous Spectrum of Stars with Extended Atmospheres 627

CHANDRASEKHAR, S. The Dynamics of Stellar Systems. I–VIII . . . 1

CHAPMAN, S. Notes on Atmospheric Sodium 309

EBBIGHAUSEN, E. G. Proper Motions in the Galactic Cluster NGC 2548 689

EDLÉN, B., J. GRANDJEAN, and P. SWINGS. New Identifications of *Fe* III in the Spectra of Early B Stars 378

ELVEY, C. T., W. LINKE, and OTTO STRUVE. Observations Made with the Nebular Spectrograph of the McDonald Observatory. III. . . . 301

GOLDBERG, LEO. Transition Probabilities for *He* I 414

GRANDJEAN, J., P. SWINGS, and B. EDLÉN. New Identifications of *Fe* III in the Spectra of Early B Stars 378

PAGE

GREENSTEIN, JESSE L. Magnitudes and Colors in the Globular Cluster Messier 4 387

GREENSTEIN, JESSE L., and OTTO STRUVE. Interstellar Calcium and Color Excess 625

HALL, JOHN S. The Coming Eclipse of ζ Aurigae 629

HALL, JOHN S. Erratum 640

HALL, JOHN S. Spectrophotometric Observations of ζ Aurigae near the Beginning of Its 1937 Eclipse 317

HALL, JOHN S. A Spectrophotometric Study of Algol 449

HOFFLEIT, DORRIT. The Cyanogen Discriminant between Giant and Dwarf Stars 621

HUFFER, C. M., A. E. WHITFORD, and JOEL STEBBINS. Space Reddening in the Galaxy 209

INGLIS, D. R., and E. TELLER. Ionic Depression of Series Limits in One-Electron Spectra 439

KING, ARTHUR S., and HENRY NORRIS RUSSELL. The Arc Spectrum of Europium 155

KOPAL, ZDENĚK. Contribution to the Effective Stellar Temperature Scale 281

LINKE, W., OTTO STRUVE, and C. T. ELVEY. Observations Made with the Nebular Spectrograph of the McDonald Observatory. III. 301

MENZEL, DONALD H., LAWRENCE H. ALLER, and JAMES G. BAKER. Physical Processes in Gaseous Nebulae. VIII. The Ultraviolet Radiation Field and Electron Temperature of an Optically Thick Nebulae . . 601

MENZEL, DONALD H., JAMES G. BAKER, and LAWRENCE H. ALLER. Physical Processes in the Gaseous Nebulae. VII. The Transfer of Radiation in the Lyman Continuum 271

MOHLER, FRED L. The Number of Lines in a Series as a Function of Electron Pressure 429

MORGAN, W. W. Note on Interstellar Reddening in the Region of γ Cygni 632

O'KEEFE, JOHN A. Remarks on Loreta's Hypothesis concerning R Coronae Borealis 294

PAGE, THORNTON. Review of: *Astronomy*, W. T. Skilling and R. S. Richardson 207

PAYNE-GAPOSCHKIN, CECILIA. Red Indices in Southern Selected Areas . 321

RICHARDSON, R. S. Erratum 208

PAGE

RICHARDSON, R. S. The Intensities of Sunspots from Center to Limb in Light of Different Colors 230

RICHARDSON, R. S. Intensity Changes in Bright Chromospheric Disturbances 368

ROACH, F. E., and O. STRUVE. The Ultraviolet Spectra of 17 Leporis and P Cygni 727

RUSSELL, HENRY NORRIS. Notes on Ellipticity in Eclipsing Binaries . 641

RUSSELL, HENRY NORRIS, and ARTHUR S. KING. The Arc Spectrum of Europium 155

SANFORD, ROSCOE F., and O. C. WILSON. On the Doublet Ratio of Interstellar H and K and the Absolute Magnitudes of Wolf-Rayet Stars . 235

SHERMAN, FRANCES. Note on the Interstellar Band at λ 4430 . . . 630

SPITZER, LYMAN, JR. The Dissipation of Planetary Filaments . . . 675

SPITZER, LYMAN, JR. Spectra of M Supergiant Stars 494

STEBBINS, JOEL, C. M. HUFFER, and A. E. WHITFORD. Space Reddening in the Galaxy 209

STRUVE, O. Review of: *Transactions of the International Astronomical Union*, edited by J. H. Oort 637

STRUVE, O., and F. E. ROACH. The Ultraviolet Spectra of 17 Leporis and P Cygni 727

STRUVE, OTTO. The Ultraviolet Spectra of A and B Stars 699

STRUVE, OTTO, C. T. ELVEY, and W. LINKE. Observations Made with the Nebular Spectrograph of the McDonald Observatory. III. . . . 301

STRUVE, OTTO, and JESSE L. GREENSTEIN. Interstellar Calcium and Color Excess 625

SWINGS, P., B. EDLÉN, and J. GRANDJEAN. New Identifications of *Fe* III in the Spectra of Early B Stars 378

TELLER, E., and D. R. INGLIS. Ionic Depression of Series Limits in One-Electron Spectra 439

TOLMAN, RICHARD C. On the Stability of Spheres of Simple Mechanical Fluid Held Together by Newtonian Gravitation 541

TOLMAN, RICHARD C. On the Stability of Stellar Models, with Remarks on the Origin of Novae 568

WHITFORD, A. E., JOEL STEBBINS, and C. M. HUFFER. Space Reddening in the Galaxy 209

PAGE

WILDT, RUPERT. Negative Ions of Hydrogen and the Opacity of Stellar Atmospheres 611

WILSON, O. C. Intercomparison of Doublet Ratio and Line Intensity for Interstellar Sodium and Calcium 244

WILSON, O. C. Possible Application of Supernovae to the Study of the Nebular Red Shifts 634

WILSON, O. C., and ROSCOE F. SANFORD. On the Doublet Ratio of Interstellar H and K and the Absolute Magnitudes of Wolf-Rayet Stars . 235

WILSON, RALPH E. The Mean Absolute Magnitudes of Class R Stars . 486

WILSON, RALPH E. Proper Motions and Mean Absolute Magnitudes of Class N Stars 352